



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/827,208 | 04/05/2001 | Antti Latva-Aho | 324-010243-US(PAR) | 5366 |

2512 7590 11/17/2006

PERMAN & GREEN
425 POST ROAD
FAIRFIELD, CT 06824

| |
|----------|
| EXAMINER |
|----------|

DEAN, RAYMOND S

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2618

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 09/827,208 | Applicant(s) LATVA-AHO ET AL. | |
| | Examiner Raymond S. Dean | Art Unit 2618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed August 16, 2006 have been fully considered but they are not persuasive.

Examiner respectfully disagrees with Applicants' assertion on Page 11, Section 2 of the Remarks "The combination of Lim and Lee fails to disclose or suggest ..." and "The combination of Lim and Lee also fails to disclose or suggest ...".

Typical access points, such as the access point of Lee, comprise card slots comprising edge card connectors for the insertion of IC cards, such as LAN cards. These edge card connectors provide power to the IC cards and enable the reading of data from said cards thus Lee further reads on an IC card reader. The edge card connector of the card slot reads on the IC card reader.

Typical LAN cards and network interface cards comprise registers for storage of MAC destination addresses. The MAC destination addresses enable network devices, such as access points, access to other network parts or devices on a LAN. Ex. An access point desiring access to a LAN would use the MAC destination address of a network part or device of the LAN in order to gain access. Lee thus teaches an access point receiving a MAC destination address from the LAN card, which reads on the limitation of receiving at least address data related to the fixed network part from the IC card.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 3, 11 – 13, 16 – 17, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim (US 6,697,355) in view Lee et al. (US 6,657,981).

Regarding Claim 1, Lim teaches a method of connecting an access point to other network elements in a wireless telecommunication system having at least one access point and at least one fixed network part (Figure 3, Column 4 lines 42 – 51) wherein the access point is a base station with at least one transceiver for offering a wireless connection to a terminal (Figure 3, Column 4 lines 42 – 44, Column 5 lines 5 – 6, the access points, which are the base stations, provide the radio communication channels via radio transceivers), the method comprising: connecting at least one access point to a functional connection with the fixed network part (Figure 3, Column 4 lines 42 – 51), and connecting necessary resources of the fixed network part to a functional connection with the access point (Figure 3, Column 4 lines 42 – 51, the access points will be able to access the necessary resources of the LAN, such as the internet, for the purpose of enabling the mobile hosts to have access to the internet)

Lim does not teach storing data on an IC card for connecting at least one access point to a functional connection with the fixed network part, connecting the IC card

inserted in the access point by an IC card reader in the access point in response to a need to connect the access point to the fixed network part, and receiving at least address data related to the fixed network part from the IC card, and connecting necessary resources of the fixed network part to a functional connection with the access point on the basis of said data from the IC card.

Lee teaches storing data on an IC card for connecting at least one access point to a functional connection with the fixed network part (Column 3 lines 51 – 59, typical LAN cards comprise data that enables the access point to connect to the LAN, such as an MAC address), connecting the IC card inserted in the access point by an IC card reader in the access point in response to a need to connect the access point to the fixed network part (Column 3 lines 51 – 59, the LAN card will be connected in response to a need to connect the access point to the LAN, typical access points, such as the access point of Lee, comprise card slots comprising edge card connectors for the insertion of IC cards, such as LAN cards, these edge card connectors provide power to the IC cards and enable the reading of data from said cards thus Lee further reads on an IC card reader), and receiving at least address data related to the fixed network part from the IC card and connecting necessary resources of the fixed network part to a functional connection with the access point on the basis of said data from the IC card (Column 3 lines 51 – 59, typical LAN cards and network interface cards comprise registers for storage of MAC destination addresses, the MAC destination addresses enable network devices, such as access points, access to other network parts or devices on a LAN, Ex.

An access point desiring access to a LAN would use the MAC destination address of a network part or device of the LAN in order to gain access).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the LAN card of Lee in the access point of Lim for the purpose of enabling said access point to connect to the LAN as taught by Lee.

Regarding Claim 2, Lim in view of Lee teaches all of the claimed limitations recited in Claim 1. Lee further teaches checking in the fixed network part if the IC card is entitled to use the necessary resources of the fixed network part (Column 3 lines 51 – 59, in order for the access point to be connected to the LAN there will be verification or authentication of the LAN card), and connecting the necessary resources of the fixed network part to a functional connection with the access point in response to the IC card having the right to use the resources of the fixed network part (Column 3 lines 51 – 59, the access point will be connected in a functional connection with the LAN on the basis of said verification or authentication).

Regarding Claim 3, Lim in view of Lee teaches all of the claimed limitations recited in Claim 2. Lee further teaches wherein said data includes an address of at least one fixed network part element and a specific identity of the IC card (Column 3 lines 51 – 59, in order for the access point to connected to the LAN the LAN card will need to have the address of a LAN element, said LAN card will also need to have the identity of said card so that it can be identified by the LAN element), the fixed network part element also comprises data on the IC card, assorted by the specific identity (Column 3 lines 51 – 59, the LAN elements will have the access data of the LAN card),

transmitting a request for connecting the access point to the network element of the fixed network part on the basis of the stored address (Column 3 lines 51 – 59, the access point will be connected in a functional connection with the LAN on the basis of the address of a LAN element), and checking the rights of the IC card by checking the data on the IC card on the basis of the specific identity and by authenticating the IC card (Column 3 lines 51 – 59, in order for the access point to be connected to the LAN there will be verification or authentication of the LAN card).

Regarding Claim 11, Lim teaches a wireless telecommunication system comprising at least one access point and at least one fixed network part (Figure 3, Column 4 lines 42 – 51), wherein the access point is a base station having at least one transceiver and configured to offer a wireless connection to a terminal (Figure 3, Column 4 lines 42 – 44, Column 5 lines 5 – 6, the access points, which are the base stations, provide the radio communication channels via radio transceivers), the access point connected to a functional connection with the fixed network part (Figure 3, Column 4 lines 42 – 51), and the access point and the fixed network part are arranged to connect necessary resources of the fixed network part to a functional connection with the access point (Figure 3, Column 4 lines 42 – 51, the access points will be able to access the necessary resources of the LAN, such as the internet, for the purpose of enabling the mobile hosts to have access to the internet).

Lim does not teach the access point is arranged to connect an IC card inserted in the access point by an IC card reader in the access point, onto which is stored data for connecting at least one access point to a functional connection with the fixed network

part and the access point is arranged to receive at least address data related to the fixed network part from the IC card, and the access point and the fixed network part are arranged to connect necessary resources of the fixed network part to a functional connection with the access point on the basis of said data from the IC card.

Lee teaches the access point is arranged to connect an IC card inserted in the access point by an IC card reader in the access point, onto which is stored data for connecting at least one access point to a functional connection with the fixed network part (Column 3 lines 51 – 59, typical LAN cards comprise data that enables the access point to connect to the LAN, such as an MAC address, typical access points, such as the access point of Lee, comprise card slots comprising edge card connectors for the insertion of IC cards, such as LAN cards, these edge card connectors provide power to the IC cards and enable the reading of data from said cards thus Lee further reads on an IC card reader), and the access point is arranged to receive at least address data related to the fixed network part from the IC card, and the access point and the fixed network part are arranged to connect necessary resources of the fixed network part to a functional connection with the access point on the basis of said data from the IC card (Column 3 lines 51 – 59, typical LAN cards and network interface cards comprise registers for storage of MAC destination addresses, the MAC destination addresses enable network devices, such as access points, access to other network parts or devices on a LAN, Ex. An access point desiring access to a LAN would use the MAC destination address of a network part or device of the LAN in order to gain access).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the LAN card of Lee in the access point of Lim for the purpose of enabling said access point to connect to the LAN as taught by Lee.

Regarding Claim 12, Lim in view of Lee teaches all of the claimed limitations recited in Claim 11. Lee further teaches wherein the fixed network part is arranged to check if the IC card is entitled to use the necessary resources of the fixed network part (Column 3 lines 51 – 59, in order for the access point to be connected to the LAN there will be verification or authentication of the LAN card), and the access point and the fixed network part are arranged to connect the access point and necessary resources of the fixed network part to a functional connection in response to the IC card being entitled to use the necessary resources of the fixed network part (Column 3 lines 51 – 59, the access point will be connected in a functional connection with the LAN on the basis of said verification or authentication).

Regarding Claim 13, Lim in view of Lee teaches all of the claimed limitations recited in Claim 12. Lee further teaches wherein said data comprises an address of at least one fixed network part element and a specific identity of the IC card (Column 3 lines 51 – 59, in order for the access point to connected to the LAN the LAN card will need to have the address of a LAN element, said LAN card will also need to have the identity of said card so that it can be identified by the LAN element), the fixed network part element also comprises data on the IC card, assorted by the specific identity (Column 3 lines 51 – 59, the LAN elements will have the access data of the LAN card), the access point is arranged to transmit a request for connecting the access point to the

Art Unit: 2618

network element of the fixed network part on the basis of the stored address (Column 3 lines 51 – 59, the access point will be connected in a functional connection with the LAN on the basis of the address of a LAN element), and the network element of the fixed network part is arranged to check the rights of the IC card by checking the data on the IC card on the basis of the specific identity and by authenticating the IC card (Column 3 lines 51 – 59, in order for the access point to be connected to the LAN there will be verification or authentication of the LAN card).

Regarding Claim 16, Lim teaches an access point for a wireless telecommunication system, wherein the access point is a base station configured to offer a wireless connection to a terminal (Figure 3, Column 4 lines 42 – 44, Column 5 lines 5 – 6, the access points, which are the base stations, provide the radio communication channels via radio transceivers), the access point comprises controller and at least one transceiver for setting up a functional connection to required resources of a fixed network part (Figure 3, Column 4 lines 42 – 51, the access points will be able to access the necessary resources of the LAN, such as the internet, for the purpose of enabling the mobile hosts to have access to the internet).

Lim does not teach the access point is configured to connect an IC card inserted in the access point to allow for reading data on the IC card by an IC card reader in the access point, the access point is configured to receive at least address data from the IC card, and the access point comprises a controller and at least one transceiver for setting up a functional connection to required resources of a fixed network part on the basis of the data stored on the IC card.

Lee teaches the access point is configured to connect an IC card inserted in the access point to allow for reading data on the IC card by an IC card reader in the access point (Column 3 lines 51 – 59, typical LAN cards comprise data that enables the access point to connect to the LAN, such as an MAC address, typical access points, such as the access point of Lee, comprise card slots comprising edge card connectors for the insertion of IC cards, such as LAN cards, these edge card connectors provide power to the IC cards and enable the reading of data from said cards thus Lee further reads on an IC card reader), the access point is configured to receive at least address data from the IC card, and the access point comprises a controller and at least one transceiver for setting up a functional connection to required resources of a fixed network part on the basis of the data stored on the IC card (Column 3 lines 51 – 59, typical LAN cards and network interface cards comprise registers for storage of MAC destination addresses, the MAC destination addresses enable network devices, such as access points, access to other network parts or devices on a LAN, Ex. An access point desiring access to a LAN would use the MAC destination address of a network part or device of the LAN in order to gain access).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the LAN card of Lee in the access point of Lim for the purpose of enabling said access point to connect to the LAN as taught by Lee.

Regarding Claim 17, Lim in view of Lee teaches all of the claimed limitations recited in Claim 16. Lee further teaches wherein said data comprises an address of at least one fixed network part element and a specific identity of the IC card (Column 3

lines 51 – 59, in order for the access point to be connected to the LAN the LAN card will need to have the address of a LAN element, said LAN card will also need to have the identity of said card so that it can be identified by the LAN element), the control means are arranged to send a request including a specific identity of the IC card for connecting the access point to the network element of the fixed network part on the basis of the stored address (Column 3 lines 51 – 59, the access point will be connected in a functional connection with the LAN on the basis of the address of a LAN element), and the control means are arranged to set up a functional connection to at least one network element of the fixed network part in response to an accepted request for connecting the access point (Column 3 lines 51 – 59, in order for the access point to be connected to the LAN there will be verification or authentication of the LAN card).

Regarding Claim 19, Lim in view of Lee teaches all of the claimed limitations recited in Claim 16. Lim further teaches wherein the access point is a base station in the wireless telecommunication system (Figure 3, Column 4 lines 42 – 44, Column 5 lines 5 – 6).

4. Claims 4 – 5, 8, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim (US 6,697,355) in view Lee et al. (US 6,657,981), as applied to Claims 1, 16 above, and in further view of Sherer et al. (6,115,376).

Regarding Claim 4, Lim in view of Lee teaches all of the claimed limitations recited in Claim 1. Lee further teaches connecting the access point to a functional connection with the resources of the fixed network part in response to the authentication

being acceptable (Column 3 lines 51 – 59, in order for the access point to be connected to the LAN there will be verification or authentication of the LAN card).

Lim in view of Lee does not teach wherein said data includes at least one key and algorithm required for authenticating the IC card the method further comprising the steps of transmitting an authentication response, calculated by means of at least one key and algorithm, to the fixed network part, authenticating the IC card by checking the transmitted authentication response in the fixed network part.

Sherer teaches at least one key and algorithm required for authenticating the IC card the method further comprising the steps of transmitting an authentication response, calculated by means of at least one key and algorithm (Column 5 lines 54 – 67, Column 6 lines 1 – 5), authenticating the IC card by checking the transmitted authentication response (Column 5 lines 54 – 67, Column 6 lines 1 – 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication method taught by Sherer in the LAN card of Lim in view of Lee for the purposes of communicating securely and preventing the spoofing of MAC addresses as taught by Sherer.

Regarding Claim 5, Lim in view of Lee teaches all of the claimed limitations recited in Claim 1. Lim in view of Lee does not teach wherein said data includes at least one key and algorithm for ciphering the connection between the access point and the fixed network part, and the method further includes the step of ciphering the traffic between the access point and the fixed network part by utilizing at least one key and algorithm.

Sherer teaches wherein said data includes at least one key and algorithm for ciphering a connection and the method further includes the step of ciphering the traffic by utilizing at least one key and algorithm (Column 5 lines 54 – 67, Column 6 lines 1 – 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication method taught by Sherer in the LAN card of Lim in view of Lee for the purposes of communicating securely and preventing the spoofing of MAC addresses as taught by Sherer.

Regarding Claim 8, Lim in view of Lee teaches all of the claimed limitations recited in Claim 1. Lee further teaches other data, in addition to said data related to the use of the access points is stored on the IC card (Column 3 lines 51 – 59, typical LAN cards comprises processors which comprise memory that stores data or code for running said processors).

Lim in view of Lee does not teach wherein the IC card comprises a security function for checking a user of the IC card.

Sherer teaches wherein the IC card comprises a security function for checking a user of the IC card (Column 1 lines 43 – 47, Column 2 lines 39 – 41, promiscuous users are checked such that spoofing can be prevented).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication method taught by Sherer in the LAN card of Lim in view of Lee for the purposes of communicating securely and preventing the spoofing of MAC addresses as taught by Sherer.

Regarding Claim 18, Lim in view of Lee teaches all of the claimed limitations recited in Claim 16. Lim in view of Lee does not teach wherein the control means are arranged to transmit a request to the IC card for calculating an authentication response and at least one ciphering key, the control means are arranged to transmit the authentication response calculated on the IC card to the fixed network part, and the transceiver means are arranged to cipher the data to be sent to the fixed network part and to decrypt the data received from the fixed network part by means of at least one ciphering key calculated on the IC card.

Sherer teaches wherein the control means are arranged to transmit a request to the IC card for calculating an authentication response and at least one ciphering key (Column 5 lines 54 – 67, Column 6 lines 1 – 5), the control means are arranged to transmit the authentication response calculated on the IC card (Column 5 lines 54 – 67, Column 6 lines 1 – 5), and the transceiver means are arranged to cipher the data and to decrypt the data received by means of at least one ciphering key calculated on the IC card (Column 5 lines 54 – 67, Column 6 lines 1 – 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication method taught by Sherer in the LAN card of Lim in view of Lee for the purposes of communicating securely and preventing the spoofing of MAC addresses as taught by Sherer.

5. Claims 6, 9 – 10, 14, 20, 21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim (US 6,697,355) in view Lee et al. (US 6,657,981), as applied to Claims 1, 11, 16 above, and in further view of Widegren et al. (US 6,374,112)

Regarding Claims 6, 14, Lim in view of Lee teaches all of the claimed limitations recited in Claims 1, 11. Lee further teaches an access point server (Figure 2, LANs that are connected to access points comprise access point servers that enable said connection to take place), and an access point register server in a functional connection thereto and includes stored data relating to the IC card (Figure 2, the server must authenticate the LAN card therefore said server will comprise authentication data thus said server is also the access point register server), the method further comprising the steps of: transmitting a specific identity of the IC card to the access point register server (Column 3 lines 51 – 59, typical LAN cards comprise a MAC address which is an identity), checking a right of the IC card to use the resources of the fixed network part (Column 3 lines 51 – 59, in order for the access point to be connected to the LAN there will be verification or authentication of the LAN card), selecting an access point server for the access point in response to the IC card having the right to use the resources of the fixed network part (Column 3 lines 51 – 59, in order for the access point to be connected to the LAN there will be verification or authentication of the wireless network card), transmitting data on the selected access point server to the access point and data on the access point to be connected to the access point server (Column 3 lines 51 – 59, in order for the access point to be connected to the LAN there will be verification or

authentication of the wireless network card, said verification or authentication comprises transmission and reception of data).

Lim in view of Lee does not teach transmitting from the access point to the access point server a request for selecting a radio network controller, selecting a radio network controller for the access point, and connecting the access point to a functional connection with the radio network controller and other optionally required resources.

Widegren teaches selecting a radio network controller (Figure 1, Column 5 lines 46 – 52), selecting a radio network controller for the access point (Figure 1, Column 5 lines 46 – 52), and connecting the access point to a functional connection with the radio network controller and other optionally required resources (Figure 1, Column 5 lines 46 – 52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the UMTS infrastructure in the wireless system of Lim in view of Lee for the purpose of providing wireless access at very high data rates and enhanced bearer services not realistically attainable with first and second generation CDMA systems as taught by Widegren.

Regarding Claim 9, Lim in view of Lee teaches all of the claimed limitations recited in Claim 1. Lim in view of Lee does not teach wherein the access point is a base station in a UMTS system, and the fixed network part comprises at least a UMTS system radio network controller RNC.

Widegren teaches wherein the access point is a base station in a UMTS system, and the fixed network part comprises at least a UMTS system radio network controller RNC (Figure 1, Column 5 lines 46 – 52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the UMTS infrastructure in the wireless system of Lim in view of Lee for the purpose of providing wireless access at very high data rates and enhanced bearer services not realistically attainable with first and second generation CDMA systems as taught by Widegren.

Regarding Claims 10, 20, Lim in view of Lee teaches all of the claimed limitations recited in Claims 1, 16. Lim in view of Lee does not teach wherein the access point is a UMTS system radio network controller RNC and the fixed network part comprises one or more network elements of a core network of a UMTS system.

Widegren teaches wherein the access point is a UMTS system radio network controller RNC and the fixed network part comprises one or more network elements of a core network of a UMTS system (Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the UMTS infrastructure in the wireless system of Lim in view of Lee for the purpose of providing wireless access at very high data rates and enhanced bearer services not realistically attainable with first and second generation CDMA systems as taught by Widegren.

Regarding Claims 21, 23, Lim in view of Lee and in further view of Widegren teaches all of the claimed limitations recited in Claims 6, 14. Lee further teaches

wherein the stored data relating to the IC card includes the specific identity of the IC card (Column 3 lines 51 – 59, typical LAN cards comprise a MAC address which is an identity).

6. Claims 7, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim (US 6,697,355) in view Lee et al. (US 6,657,981) in view of Widegren et al. (US 6,374,112), as applied to Claims 6, 14 above, and further in view of Sherer et al. (6,115,376).

Regarding Claims 7, 15, Lim in view of Lee and in further view of Widegren teaches all of the claimed limitations recited in Claims 6, 14. Widegren further teaches connecting the access point to a functional connection with the radio network controller (Figure 1, Column 5 lines 46 – 52).

Lim in view of Lee and in further view of Widegren does not teach calculating at least one cipher key and authentication response in the IC card and in the access point register server, transmitting the authentication response calculated in the IC card to the access point register server, authenticating the IC card by checking if the transmitted authentication response corresponds to the authentication response calculated in the access point register server, and connecting, in response to an acceptable authentication, the access point to a functional connection with the radio network controller in such a manner that the traffic between the access point and the radio network controller is ciphered by the calculated cipher keys.

Sherer teaches calculating at least one cipher key and authentication response in the IC card and in the access point register server (Column 5 lines 54 – 67, Column 6 lines 1 – 5), transmitting the authentication response calculated in the IC card to the access point register server (Column 5 lines 54 – 67, Column 6 lines 1 – 5), authenticating the IC card by checking if the transmitted authentication response corresponds to the authentication response calculated in the access point register server (Column 5 lines 54 – 67, Column 6 lines 1 – 5), and connecting, in response to an acceptable authentication, the access point to a functional connection in such a manner that the traffic between the access point and the LAN is ciphered by the calculated cipher keys (Column 5 lines 54 – 67, Column 6 lines 1 – 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the authentication method taught by Sherer in the LAN card of Lim in view of Lee and in further view of Widegren for the purposes of communicating securely and preventing the spoofing of MAC addresses as taught by Sherer.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lim (US 6,697,355) in view Lee et al. (US 6,657,981) in view of Sherer et al. (6,115,376), as applied to Claim 8 above, and further in view of Widegren et al. (US 6,374,112).

Regarding Claim 22, Lim in view of Lee and in further view of Sherer teaches all of the claimed limitations recited in Claim 8.

Lim in view of Lee and in further view of Sherer does not teach wherein the other data stored on the IC card includes data required in UMTS system USIM application.

Widegren teaches the data stored that includes data required in UMTS system USIM application (Figure 1, Column 5 lines 28 – 30, a UMTS system will have storage for data required in a UMTS system USIM application).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the UMTS infrastructure in the wireless system of Lim in view of Lee and in further view of Sherer for the purpose of providing wireless access at very high data rates and enhanced bearer services not realistically attainable with first and second generation CDMA systems as taught by Widegren.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

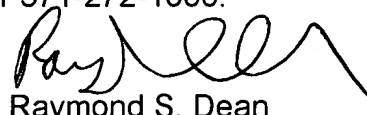
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2618

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Raymond S. Dean
October 31, 2006



EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1200